VIA ELECTRONIC MAIL: dmcclure@waterboards.ca.gov

4 December 2009

Mr. Daniel McClure, P.E.
Water Resource Control Engineer/Project Manager TMDL Unit
Central Valley Regional Water Quality Control Board (CVRQCB)
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

RE: Phase-III Water Quality Criteria (WQC) Derivation Method Developed for Diuron

Dear Mr. McClure:

The Western Plant Health Association (WPHA) welcomes the opportunity to comment on the technical document authored by Tessa Fojut, Ph.D., Amanda Palumbo, Ph.D., and Ronald Tjeerdema, Ph.D., of the Environmental Toxicology Department, University of California at Davis, concerning their updated methodology for deriving freshwater water quality criteria (WQC) for the protection of aquatic life that was previously developed (TenBrook et al. 2009).

This letter serves to support the technical and more comprehensive comments provided by the major registrant of diuron and member of WPHA – E.I. DuPont De Nemours Company. WPHA represents the interests of fertilizer and crop protection manufacturers, distributors, formulators and retailers in California, Arizona, and Hawaii, and our members comprise more than ninety percent of all the companies marketing crop protection products in these states.

WPHA restates for the written record our previous concerns about the CVRWQCB embarking on an expeditious and narrowly focused policy towards developing an excessively conservative WQC Method for 7 active ingredients to then be applied to listed "waterbodies" just within the Central Valley. This initiative would be subject to rigorous monitoring and compliance activities through your agency's regulatory enforcement against growers/agricultural dischargers. We would respectfully suggest, once again, that the CVRWQCB staff would be judicious in redirecting their attention to the ongoing harmonization effort between the Clean Water Act (CWA) and the Federal Insecticide, Fungicide and Rodenticide Act **(**FIFRA**)** by the United States Environmental Protection Agency (US EPA) Office of Water (OW) and Office of Pesticide Programs (OPP). As you may be aware, beginning in 2010, the OW/OPP harmonization effort will have a series of public workshops throughout the United States that will attempt to solicit input from a variety of technical stakeholders on how best to address the lingering issue of limited aquatic toxicity datasets from pesticides. The unified outcome may prove both fruitful and scientifically justifiable to permit its use by each of the States.

In accordance with the request for public comments, WPHA is providing the following items for your sincere consideration before finalization of this WQC Method for diuron:

1. As the authors for this WQC method (Fojut et al.) had noted, some of the data quality criteria are not appropriate to plant studies and applying the method to aquatic plant data revealed challenges both to the review process and to the selection of endpoints.

2. The extensive data review for diuron emphasizes that studies conducted by registrants and submitted to meet pesticide registration data requirements of the US EPA and other regulatory agencies are appropriate for establishing environmental quality criteria. The two studies selected to establish the acute and chronic criteria (Baer, 1991 and Blasberg, 1991) were conducted by the registrant, submitted to the US EPA, and reviewed by the US EPA. US EPA deemed the studies acceptable for meeting regulatory requirements. While research studies published in the peer-reviewed literature may be acceptable for consideration in setting environmental criteria, it is critical that data meet the standards required for consistency in regulatory decisions, whether at the national, state or regional level. WPHA encourages Dr. Fojut et al. to continue working with registrants to identify additional data that meet the goals of the criterion setting process.

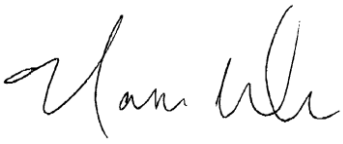
3. In accordance with the published method for an acute criterion, the authors divided the lowest LC50 by an assessment factor since acceptable data for only two taxa met the data quality requirements of the method (data for 13 other taxa were classified low reliability, low relevance). As the assessment factors were based on data for neurotoxic insecticides, WPHA believes that the application of the assessment factor to a herbicide with a different mode of action requires a more convincing rationale than is provided in the document.

4. In a significant departure from the data quality requirements of the method, the authors applied an additional safety factor of 2 so that the final acute criterion was below all endpoints reported for all taxa regardless of the reliability of the data. WPHA believes it's inappropriate that low reliability, low relevance data dictate the final acute criterion as it appears to contradict the goals of a data quality review. As noted in the document, this resulted in a criterion that was equivalent to the benchmark proposed by the US EPA.

5. Aquatic plant endpoints should be based on measurements of growth or growth rate as recommended by the Organisation for Economic Co-operation and Development (OECD) and should consider the potential for recovery. Aquatic plant studies are designed to allow determination of the EC50, which is a conservative, robust endpoint. The endpoints measured in aquatic plant studies are sublethal (effects on growth), and the effects are often reversible. Aquatic plants exposed to diuron at the EC50 recover and resume normal growth when exposed to fresh growth medium. WPHA believes that the No Observed Effect Concentration (NOEC) is not an appropriate endpoint, since it is dependent on dose-selection and cannot be compared among species.

Thank you for your consideration of WPHA's comments concerning the updated methodology for deriving freshwater WQC for the protection of aquatic life authored by Dr. Fojut et al. WPHA looks forward to reviewing your responses to our letter. We continue to welcome all opportunities to work with CVRWQCB on this and other important water quality issues.

Sincerely,



Nasser Dean
Director, Environmental & Regulatory Affairs

cc via email: Ken Landau, Assistant Executive Officer
Jerry Bruns, Environmental Program Manager
Tessa Fojut, Ph.D., University of California at Davis